

GLOSSARY OF TERMS FOR DECAPODS

Abdomen – (Also Pleon) Trunk tagma following thorax and including the telson; in malacostraca bearing pleopods or uropods or both. In crabs it is bent sharply forward under the thorax and much wider in females than in males.

Acicle – Antennal scale reduced to a spine.

Afferent channels – openings through which water passes to gills. In brachyuran crabs, usually opening behind **pterygostomian regions** and in front of the chelipeds except in certain Oxystomata in which they open at anterolateral angles of **palate** or **endostome**.

Ambulatory leg – See pereopod.

Antenna (Antenna 2) – One pair of anterior sensory appendages of the head region, placed morphologically next behind antennule. Uniramous in some crustaceans but biramous in all nauplii and in adults of most classes. May be extremely long and composed of many small articles or reduced to a rudimentary appendage or lost.

Antennal Scale – See scaphocerite.

Antennal spine – spine on anterior edge of carapace immediately below orbit, adjacent to base of antenna.

Antennule – First pair of sensory appendages of the head region, usually thread-like and multiarticulate. May be smaller or larger than the following appendages, the antennae.

Anterior – a position: (relates to the body) anterior indicates that an appendage is located near the head end of the body as opposed to the rear end of the body (the posterior).

Anterolateral teeth – teeth on anterolateral border of crabs (excluding outer orbital tooth) i.e., the margin between the outer region of the orbit and the widest part of the carapace.

Apodeme – any cuticular growth of the body wall, an infold for the attachment of muscles.

Appendix interna – small separate branch on the mesial side of the pleopodal endopodite (usually tipped with hooks which interlock with opposite member in swimming)

Appendix masculina – Accessory male organ located mesially on second pair of pleopods between endopodite and appendix interna. Serves in copulation.

Arthrobranchiae (arthrobranch) – Gills attached to the articular membrane between the coxa of an appendage and body wall.

Article – Individual element of a crustacean appendage or limb, often applied to the antennae.

Attractor epimeralis muscle – Important muscle in many decapods, inserted along the line of the branchiocardiac groove in the carapace.

Basicerite – Second article of the antennal peduncle (In Caridea bearing the scaphocerite).

Basiophthalmite – Proximal article of eyestalk. Articulating with the distal article (podophthalmite), which bears the corneal surface of the eye.

Basis (basipodite) – second article (from body) of leg or maxilliped. Sixth article from distal end of limb.

Biramous: An appendage composed of two rami or branches (endopod and exopod).

Branchia (pl. branchiae) – (Gill) Thin walled finger-like or leaf-like structure extending outward from the limb or secondarily from the side of the body, functioning for respiration.

Branchial chamber – Space between the body and the wall of the carapace, enclosing the branchiae (gills).

Branchiocardiac groove – Groove on dorsal surface of the carapace: separating branchial and cardiac regions.

Branchiostegal spine – Spine on anterior edge of carapace (or near it), immediately below branchiostegal groove.

Branchiostegite – part of the carapace not coalesced ventrally with thoracic somites, but overhanging on each side as covering for gill chamber.

Buccal cavity – cavity on ventral surface of body in which mouthparts are situated; bounded anteriorly by epistome, laterally by free edges of carapace. Within this ‘frame’ lie the mouthparts, which in most brachyuran are covered by the operculiform maxillipeds.

Carapace – The portion of the hard exoskeleton, or shell, that covers all or part of the body of many crustaceans; in shrimps, lobsters, and crabs, the carapace covers the head and thorax.

Caridean lobe – External rounded projection on basal part of the exopod of the first maxilliped (In Caridea).

Carina – keel-like ridge or prominence.

Carpus (carpopodite) – third article from the distal end of the leg.

Cervical groove – complex groove running across carapace. Transverse at middle, then turning obliquely forward (and outward in brachyurans) to anterolateral margin.

Chela (chela pl.) – arrangement of distal two articles of crustacean limb in which the terminal article is opposed to article preceding it in an adaptation for grasping. In true chelae, the terminal two articles are shaped as fingers, one closing against the other. In subchela, the terminal article (dactylus) usually closes against the distal surface of penultimate article (propodus).

Chelipeds – pair or pairs of thoracic legs behind maxillipeds; bearing chelae, or claws, and often stouter than other legs.

Coxa (coxopodite) – First or proximal article of leg or maxilliped. Article of the limb attached directly to the sternite of the body (except in rare forms).

Dactylus (dactylopodite) – terminal or distal article of leg, moveable finger of cheliped.

Deflexed front – Broadly down-turned front marginal part of carapace in some decapods.

Distal – (a position) direction away from central part of body; opposite of proximal.

Dorsal – a position: (relates to the body) dorsal relates to the topside of the animal.

Dorsal plate – Spindle shaped division of the carapace in some astacidean decapods intercalated in the median suture, may be related to the dorsal organ.

Dorsoventralis posterior – Important muscle in crayfish and other decapods connecting head apodemes with internal surface of carapace just behind the cervical groove.

Efferent channels – Channels through which water passes from the gills. Opening at sides of the endostome, except in Oxystomata in which they open at the middle of the endostome.

Endite – Inwardly (medially) directed lobe of pre-coxa, coxa, basis or ischium.

Endognath – Inner or principal branch (endopod) of a maxilliped.

Endophragm – (Arthrophragm) Wall formed by the union of apposed apodemes, forming part of the endoskeleton of some decapods.

Endopod (ite) – Innermost (mesial) ramus of an appendage or limb, arising from protopod basis. In the Eumalacostraca typically composed of 5 articles (ischium-dactylus).

Endoskeleton – Internal hard parts of some decapods consisting mainly of endophragms.

Endostome – Part of the epistome forming the palate (roof of the buccal cavity) in brachyurans and usually separated from the epistome proper by a transverse ridge.

Epibranchial (epibranchial region) – Anterior part of branchial region of decapod carapace. Often with a strong spine, referred to as epibranchial spine.

Epigastric lobes – Anterior lobes or subregions of the gastric regions of the carapace.

Epimere – lateral part of the wall of the body somites, situated between the tergum and insertion of appendages.

Epipod (ite) – Laterally directed ramus of the coxa of the first seven thoracic coxae. May be present or absent.

Epistome – A plate of varying shape lying between the labrum and bases of the antennae. In shrimps it is comparatively narrow and separated on each side from the lateral portions of the carapace by exhalant branchial channels. In Astacidea and Anomura it is broad and in contact with the carapace on each side. In Brachyura it is firmly united with the carapace. The epistome forms the anterior part of the buccal frame.

Exognath – lateral or secondary branch (exopod) of the maxilliped.

Exopod (ite) – Outer ramus of limb arising from protopod basis. May contain variable number of articles or be reduced or lacking.

Exoskeleton – Entire horny (in part chitinous) more or less calcified outer covering of crustacean body and its appendages.

Eyestalk – Peduncle movably articulated with head carrying eye at its distal extremity. May be divided into 2-3 articles and may be retractable.

Fingers – Narrow scissor-like blades of the pincer end of the cheliped (dactylus) and the fixed finger (propodus).

Front – frontal portion of the carapace; that portion of the crab carapace lying between the orbits.

Frontal plate – Modified rostrum in brachyurans, which bears downward projecting process between antennules that unites with epistome.

Frontal teeth – true frontal teeth: those teeth originating on the front (exclusive of the inner orbital teeth)

Gastric mill – Apparatus of varying complexity in stomodeum, which serves to break up food. Consists of a framework of movable articulated ossicles developed as thickened and calcified part of the stomodeal lining. Most highly specialized in decapods.

Gastric region – Large median area, in crab carapace it is bounded by the cervical suture, laterally by the hepatic regions and anteriorly by the front orbital regions. Divisible into the following subregions or lobes: epigastric, protogastric, mesogastric, metagastric and urogastric.

Gastrolith – Discoid calcareous nodule common in stomodeum of some decapods.

Genital region – see urogastric lobe.

Gill – See Branchia.

Gill chamber – See Branchial chamber.

Gonopod – Modified male pleopod serving for transmittal of spermatophores to female.

Gonopore – Outlet for genital products, generally placed constantly in different crustaceans.

Green gland – One of a pair of complex excretory glands located in the antenna on the front of the head of decapods.

Hand – (Chela) propodus and dactylus of cheliped.

Hemocoel – Lacunar system extending throughout much of the body, filled by blood.

Hemocyanin – Copper-containing respiratory pigment in the blood of malacostracans.

Hemoglobin – Oxygen-carrying protein coloring substance of red plasma in blood.

Hepatic region – Small, paired, subtriangular anterolateral region, wedged between the branchial and the gastric regions and is either margin of the carapace or the margin of the orbit in brachyuran.

Incisor process – biting portion of gnathal lobe in mandible.

Ischium (ischiopodite) – fifth article from distal end of leg, usually the first large article of the maxilliped.

Labium – See metastoma.

Labrum – unpaired outgrowth arising just in front of the mouth and more or less covering it.

Lacinia mobilis – Small, generally toothed process articulated with the incisor process of the mandible.

Lateral – a position: the side, or outer edge of an article facing away from the body.

Linea anomurica (Linea dromica; Linea homolica, etc.) – longitudinal groove or uncalcified line on carapace, which may form a hinge. Such lines are found in various groups, from which come the names.

Mandible – The third cephalic appendage, used to masticate food.

Mandibular palp – distal articulated part of the mandible that functions as an aid in feeding or cleaning.

Maxilla – (Maxilla 2) Paired mouthparts used to filter food particles from the water. They are located immediately posterior to maxillule.

Maxilliped – Anterior thoracic appendage (one, two or three) modified to act as mouthpart, its body segment usually fused to the cephalon.

Maxillule – (Maxilla 1) small pair of mouthparts situated posterior to the mandible.

Medial – a position: usually the inside face of an article (that facing the body).

Merus (meropodite) – fourth article from the distal end of the leg, sometimes called the arm of the cheliped.

Mesogastric lobe – median lobe or subregion of the gastric region, pentagonal in form and with long narrow anterior prolongation.

Metastoma – lower lip, behind mandibles, usually cleft into a pair of lobes called paragnatha.

Molar process – grinding portion of the gnathal lobe of the mandible.

Ocular peduncle – Eyestalk.

Orbit – Cavity in carapace containing eye.

Orbital region – Narrow space bordering upper margin of the orbit; not always distinguishable.

Palate – See Endostome.

Palm – proximal part of the propodus of the chela.

Pereon – portion of trunk usually with locomotory appendages.

Pereopod (peraeopod) – locomotory appendage (or leg) of the pereon that consists of the following segments (in order from proximally to distally): coxa, basis, ischium, merus, carpus, propodus, dactylus.

Petasma – Copulatory organ of male penaeid shrimps that is formed from the first abdominal appendages (pleopods); used by the male to thrust the spermatophore against the thelycum of the female.

Pleon – Abdomen of crustacea.

Pleopod – limb of any of the first five abdominal segments in Eumalacostraca.

Pleura – See Epimere.

Pleurobranchia – gills attached to the lateral wall of the body, dorsal to the articulation of the appendage.

Podobranchia – gills attached to the coxa of the appendage.

Posterior – a position: (relates to the body) posterior indicates that an appendage is located near the rear end of the body as opposed to the head end of the body (the anterior).

Postorbital groove – groove on the carapace behind the orbit and more or less parallel to the margin of the orbit.

Propodus (protopodite) – second article from the distal end of the leg. Propodus of the cheliped consists of the palm and the narrow fixed finger.

Prosartema – Scale implanted on inner margin of the basal segment the antennular peduncle; found in Penaeidea.

Protogastric lobe – Anterolateral lobe or subregion of gastric region of the carapace.

Protopod (ite) – peduncle of an appendage; in unmodified form consisting of 1 coxal and 1 basal article.

Proximal – (a position) direction closest to the central part of the body; opposite of proximal.

Pterygostomian region – triangular space on the ventral surface of the carapace; on either side of the buccal cavity in Brachyura; at anterolateral corner of carapace in shrimps.

Pterygostomian spine – spine at anterolateral (anteroventral) corner or border of carapace in shrimps.

Ramus (sing), Rami (pl) – Branch of a limb or other appendage (commonly used for pleopods and uropods).

Rostrum – Anteromedial projection of frontal margin of head.

Scaphocerite – antennal scale (exopod).

Serrate – Edged with toothlike projections, as in a saw.

Seta (sing), Setae (pl) – Hair-like process of cuticle that is clearly articulated with the basal cuticle (see spine). Some authors call very solid, thickened setae "spines," but "spinose setae" or "spine-like setae" is more accurate. Robust setae are very stout setae, as opposed to slender setae. Plumose setae have small setules, giving a feather-like appearance. Pectinate setae have small spines, giving a comb-like appearance.

Spine – A pointed out-pocketing of the cuticle that is not articulated with the cuticle at its base (Wilson, 1989). (See Seta)

Stylocerite – spine or rounded lobe on lateral aspect of basal article of antennule.

Sunhepatic region – Area below hepatic region and anterolateral border of carapace.

Suborbital spine – Spine on lower rim of orbit.

Supraorbital spine – Spine above and behind orbit.

Tagma (sing.), tagmata (pl.) – major division of the body (e. head, thorax, abdomen), each composed of varying number of somites.

Telson – Terminal somite of abdomen.

Tergite – Dorsal plate of segment.

Thelycum – External seminal receptacle (receives the spermatophore from the male during mating), variously developed, lying on sternum of thorax and formed by outgrowths from the last and next to last thoracic somites.

Uniramous – Composed of a single branch. (see biramous)

Urogastric lobe – Posteromedian lobe or subregion of gastric region; sometimes called genital region.

Uropod (ite) – Limb of sixth abdominal segment in Eumalacostraca. Generally fan-like but can be reduced or modified.

Ventral – a position: (relates to the body) ventral relates to the underside of the animal.

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See also the Glossary section of the website of the Natural History Museum of Los Angeles County:
<http://atiniui.nhm.org/glossary/index.html>